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| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 10/062,044 |
| | Filing Date | 1/31/02 |
| | First Named Inventor | Steven Teig, et al. |
| | Group Art Unit | 2825 |
| | Examiner Name | N. Levin |
| Total Number of Pages in This Submission | Attorney Docket Number | SPLX.P0093 |

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| Firm Or Individual name | Gregory Suh, Reg. No. 48,187 of Stattler Johansen & Adeli LLP |
| Signature | |
| Date | March 23, 2004 |

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| Signature | | Date | March 23, 2004 |

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PATENT
Docket No. SPLX.P0093

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Gregory Suh

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Steven Teig, et al.

Serial No.: 10/062,044

Filing Date: 1/31/02

For: METHOD AND APPARATUS FOR
PRODUCING A CIRCUIT
DESCRIPTION OF A DESIGN

**INFORMATION DISCLOSURE
STATEMENT UNDER 37 C.F.R. § 1.97**

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Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, applicants submit with this Information Disclosure Statement the attached Form PTO-1449, and copies of the documents listed in the 1449 form for consideration by the Examiner. The Examiner is requested to make these documents of record. Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

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Dated: March 23, 2004

Respectfully submitted,

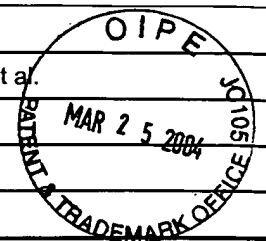
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|---|---|----|---|------------------------|---------------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Application Number | 10/062,044 |
| | | | | Filing Date | 1/31/02 |
| | | | | First Named Inventor | Steven Teig, et al. |
| | | | | Group Art Unit | 2825 |
| | | | | Examiner Name | N. Levin |
| Sheet | 1 | of | 3 | Attorney Docket Number | SPLX.P0093 |



| U.S. PATENT DOCUMENTS | | | | | | |
|-----------------------|--------------------------|----------------------|--------------------------------------|--------------------------------------|--|---|
| Examiner* Initials | Cite No. ¹ | U.S. Patent Document | | Date of Publication MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number | Kind Code ² (if known) | | | |
| | 1. | 2002/0157063 | A1 | 10-24-2002 | Besson | |
| | 2. | 2002/0178432 | A1 | 11-28-2002 | Kim et al. | |
| | 3. | 2003/0145288 | A1 | 07-31-2003 | Wang et al. | |
| | 4. | 4,703,435 | | 10-27-1987 | Darringer et al. | |
| | 5. | 5,003,487 | | 03-26-1991 | Drumm et al. | |
| | 6. | 5,521,835 | | 05-28-1996 | Trimberger | |
| | 7. | 5,537,330 | | 07-16-1996 | Damiano et al. | |
| | 8. | 5,610,829 | | 03-11-1997 | Trimberger | |
| | 9. | 5,892,678 | | 04-06-1999 | Tokunoh et al. | |
| | 10. | 5,903,466 | | 05-11-1999 | Beausang et al. | |
| | 11. | 5,991,524 | | 11-23-1999 | Belkhale et al. | |
| | 12. | 6,035,107 | | 03-07-2000 | Kuehlman et al. | |
| | 13. | 6,080,204 | | 06-27-2000 | Mendel | |
| | 14. | 6,216,252 | B1 | 04-10-2001 | Dangelo et al. | |
| | 15. | 6,311,317 | B1 | 10-30-2001 | Khoche et al. | |
| | 16. | 6,334,205 | | 12-25-2001 | Iyer et al. | |
| | 17. | 6,389,586 | B1 | 05-14-2002 | McElvain | |
| | 18. | 6,397,170 | B1 | 05-28-2002 | Dean et al. | |
| | 19. | 6,421,818 | B1 | 07-16-2002 | Dupenloup et al. | |
| | 20. | 6,446,240 | B1 | 09-03-2002 | Iyer et al. | |
| | 21. | 6,453,447 | B1 | 09-17-2002 | Gardner et al. | |

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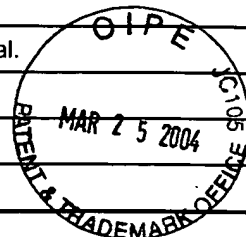
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| | | | Filing Date | 1/31/02 | |
| | | | First Named Inventor | Steven Teig, et al. | |
| | | | Group Art Unit | 2825 | |
| | | | Examiner Name | N. Levin | |
| Sheet | 2 | of | 3 | Attorney Docket Number | SPLX.P0093 |



| U.S. PATENT DOCUMENTS | | | | | | |
|-----------------------|-----|-----------|----|------------|-------------------|--|
| | 22. | 6,470,478 | B1 | 10-22-2002 | Bargh et al. | |
| | 23. | 6,470,486 | B1 | 10-22-2002 | Knapp | |
| | 24. | 6,496,972 | B1 | 12-17-2002 | Segal | |
| | 25. | 6,519,609 | B1 | 02-11-2003 | Touzet | |
| | 26. | 6,519,754 | B1 | 02-11-2003 | McElvain et al. | |
| | 27. | 6,523,156 | B2 | 02-18-2003 | Cirit | |
| | 28. | 6,539,536 | B1 | 03-25-2003 | Singh et al. | |
| | 29. | 6,543,037 | B1 | 04-01-2003 | Limqueco et al. | |
| | 30. | 6,546,541 | B1 | 04-08-2003 | Petranovic et al. | |
| | 31. | 6,574,779 | B2 | 06-03-2003 | Allen et al. | |
| | 32. | 6,618,835 | B1 | 09-09-2003 | Garlapati et al. | |

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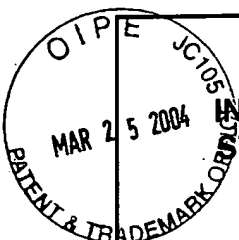
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| | | | | First Named Inventor Steven Teig, et al. |
| | | | | Group Art Unit 2825 |
| | | | | Examiner Name N. Levin |
| Sheet | 3 | of | 3 | Attorney Docket Number SPLX.P0093 |

| NON PATENT LITERATURE DOCUMENTS | | | | |
|---------------------------------|--------------------------|---|--|----------------|
| Examiner* Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | | T ⁶ |
| | 33. | NN78055443, "Automatic Remap", IBM Technical Disclosure Bulletin, Vol. 20, No. 12, May 1978, pp. 5443-5445 (5 pages). | | |
| | 34. | NN9411291, "Design of Portable Library using Parameterized Cells", IBM Technical Disclosure Bulletin, Vo.. 37, No. 11, pp. 291-292 (4 pages). | | |
| | 35. | Markovic et al., "FPGA to ASIC Conversion Design Methodology with the Support for Fast Retargeting to Different CMOS Implementation Technologies", Proceedings of 2002 22 nd International Conference on Microelectronics, Vol. 2, 14 May 2000, pp. 703-706. | | |
| | 36. | Ruiz et al., "Design and Prototyping of DSP Custom Circuits Based on a Library of Arithmetic Components", Vol. 1, 9 November 1997, pp. 191-196. | | |
| | 37. | Tamiya, Y., "Delay Estimation for Technology Independent Synthesis", 1997 Proceedings of the ASP-DAC '97, Asia and South Pacific Design Automation Conference, 28 January 1997, pp. 31-36. | | |
| | 38. | Yi, J. H. et al., Technology Mapping for Storage Elements Based on BDD matching, Proceedings of the 40 th Midwest Symposium on Circuits and Systems, pp. 1099-1102, vol.2, August 1997. | | |

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